Risk

Investment Policy: How to Win the Loser’s Game
By Charles D. Ellis (Part 9 of 14)

Risk is such a simple little word that it is amazing how many different meanings are given to it by different users.

Active investors typically think of risk in four different ways. One is price risk: You can lose money by buying stock at too high a price, and if you think a stock might be high, you know you are taking some price risk.

Another type of risk is called interest rate risk: If interest rates go up more than is now expected (and already discounted in the market), your stocks will go down. You’ll know you were taking risk.

A third type of risk would be business risk. The company may blunder and earnings may not develop. If so, the stock will drop. Again you were taking risk.

In the extreme, the company may fail completely. That’s what happened with Equity Funding, Penn Central, and Bank of New England, and very nearly happened with Chrysler and International Harvester. As the old pros will tell you, “Now that is risk!”

They are right. But there is another way to look at risk that has come from the extensive academic research done over the past two decades: more and more investment managers and clients are using it, because there’s nothing so powerful as a theory that works. Here’s the concept:

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<table>
<thead>
<tr>
<th>Asset Class Returns*</th>
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<tr>
<td>Through June 30, 1994</td>
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<table>
<thead>
<tr>
<th>United States</th>
<th>YTD 1994</th>
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<tbody>
<tr>
<td>1-Yr. Bonds</td>
<td>+0.7%</td>
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<tr>
<td>5-Yr. Bonds</td>
<td>-3.3%</td>
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<tr>
<td>Large Stocks</td>
<td>-3.5%</td>
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<tr>
<td>Large Value Stocks</td>
<td>-7.0%</td>
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<tr>
<td>Small Stocks</td>
<td>-1.0%</td>
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<tr>
<td>Small Value Stocks</td>
<td>+0.4%</td>
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<th>International</th>
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<tr>
<td>Large Stocks</td>
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<th>Japan</th>
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<td>Small Stocks</td>
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<th>Continental Europe</th>
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<td>Small Stocks</td>
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<th>United Kingdom</th>
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<td>Small Stocks</td>
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<th>Pacific Rim</th>
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<td>Small Stocks</td>
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International stocks, led by Japan, continue to bolster the performance of TAM portfolios. Many markets appear to be locked in a “trading range,” frustrating active managers and short-term speculators. Once they return from their summer vacations armed with new predictions and forecasts, the fireworks should begin again.

*See “Performance Notes” on back page for explanations.

<table>
<thead>
<tr>
<th>TAM Portfolio Returns Net of Fees*</th>
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<tbody>
<tr>
<td>Through June 30, 1994</td>
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<table>
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<tr>
<th>Risk (% stocks)</th>
<th>YTD 1994</th>
<th>1993</th>
<th>Since Inception</th>
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<tbody>
<tr>
<td>Aggressive (95%)</td>
<td>+5.7%</td>
<td>+21.1%</td>
<td>+28.0%</td>
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<tr>
<td>Growth (85%)</td>
<td>+2.9%</td>
<td>+16.6%</td>
<td>+19.7%</td>
</tr>
<tr>
<td>Moderate (65%)</td>
<td>+1.8%</td>
<td>+14.0%</td>
<td>+16.0%</td>
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<tr>
<th>Benchmarks Comparisons</th>
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<tr>
<td>Balanced Fund Index</td>
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<tr>
<td>Capital Apprec. Index</td>
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<tr>
<td>S&amp;P 500 Stock Index</td>
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<td>Salomon Broad Bond Index</td>
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*See “Performance Notes” on back page for explanations.
Investors are exposed to three kinds of investment risk. One kind of risk simply cannot be avoided, but investors are rewarded for taking it. Two other kinds of risk can be avoided or even eliminated, and investors are not rewarded for accepting these unnecessary and avoidable kinds of risk.

Before exploring these three quite different kinds of risk more fully—and showing how investment managers and clients can use their understanding in establishing investment policy—let’s pause to show the way active investors think about risk of the kind we’ll soon see is not rewarded.

The basic assumption of all active investors is that they will do better than the market because they will discover and exploit opportunities for profit by buying stocks that are underpriced or by selling stocks or groups of stocks that are overpriced.

For active investors, the risk they take that their judgment will prove wrong is a cost they are willing to incur as they reach out for opportunity. They do not expect to be right all the time, but they certainly expect to have a good batting average. (As explained in Chapter 1, most will be disappointed.)

What is important at this point in our discussion is that active investors should not expect to profit because they take risks on individual stocks or groups of stocks; they should expect to profit in spite of the risks taken (after compensating for their losses or errors.)

Now let’s return to the theory that is so powerful and useful. As noted, investors are exposed to three kinds of investment risk. One kind of risk simply cannot be avoided, but it does pay investors for taking it. Two other kinds of risk can be virtually eliminated, and do not pay for being taken.

The risk that cannot be avoided is the risk inherent in the overall market. This market risk pervades all investments. It can be increased by selecting volatile securities or by using leverage, and it can be decreased by selecting securities with low volatility or by keeping part of a portfolio in cash equivalents. But it cannot be avoided or eliminated. It is always there. So it must be managed.

The two kinds of risk that can be avoided or eliminated are closely associated. One involves the risk linked to individual securities; the other involves the risk that is common to a group of securities.

The first can be called individual stock risk, and the second can be called stock group risk.¹

A few examples will clarify the meaning of stock group risk.

Growth stocks will, as a group, move up and down in price in part because of changes in investor confidence and willingness to look more or less distantly into the future. (When investors are very confident, they will look far into the future when evaluating growth stocks.) Interest-sensitive issues such as utility and bank stocks will all be affected by changes in expected interest rates. Stocks in the same industry—autos, retailers, computers, and so forth—will share market price behavior driven by changing expectations for their industry as a whole. The number of common causes that affect groups of stocks is surely great, and most stocks belong simultaneously to several different groups. To avoid unnecessary complexity, and to avoid triviality, portfolio managers will usually focus their thinking on major forms of stock group risk.

The central fact about both stock group risk and individual stock risk is this: They do not need to be accepted by the investor. They can be eliminated. Unlike the risk of the overall market, risk that comes from investing in particular market segments or specific issues can be diversified away—

to oblivion.

As a result, in an efficient market no incremental reward can or will be earned over the market rate of return simply by taking either more individual stock risk or more stock group risk. Either type of risk should be incurred only when doing so will enable the portfolio manager to make an investment that will achieve truly worthwhile increases in returns. The evidence is overwhelming that, while enticing, such ventures are not sufficiently rewarding.

The lack of reward for taking individual stock risk or stock group risk is important because the portfolio manager who takes such risks with his clients’ funds can only hope to be rewarded by his superior skill—relative to the aggregate skill of all competing investment managers—in selecting individual stocks or groups of stocks that are inappropriately priced. As explained in Chapter 2, the investment manager who takes these risks can only profit if his competitors have made a mistake.

Clearly, such risks can be avoided by the simple and convenient strategy of designing a portfolio that replicates the market: no deviations in portfolio composition, no deviations in rate of return relative to the overall market, and no stock group risk or individual stock risk.

¹Academic writers use slightly different terms to describe the same three types of risk: market risk is called systematic risk, individual stock risk is specific risk, and stock group risk is extra market risk. The terms used here seem clearer and more natural. Risk identified as either individual stock risk or group risk is the risk that the price of an individual stock or group of stocks will behave differently than the overall market—either favorably or unfavorably—over the time period for which investment returns are measured.

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Note that eliminating these two particular forms of risk does not mean all risk is gone. Overall market risk will always be there, and in the field of risk, that’s the big one.

The great advantage of the “market fund,” a portfolio that replicates the overall market, is this: Such a fund provides a convenient and inexpensive way to invest in equities, with the riskiness of particular market segments and specific issues diversified away.

Risk-averse investors are willing to accept lower rates of return if they can reduce the market risks they must take in investing. And they are willing to see other investors get higher rates of return as an inducement to accept a larger share of the unavoidable market risk. But they will not pay their risk-taking confreres to take risks that can quite easily be avoided altogether by “buying the market.”

Market risk is different. Because it cannot be eliminated, risk-averse investors must and will accept a less-than-market rate of return in order to achieve a less-than-market risk. And by so doing, they proffer an above-average rate of return to investors willing to accept a greater-than-average market risk. This is why investors who accept more-than-average market risk—particularly over time—are rewarded with better-than-average market returns.

The level of market risk taken in an equity portfolio can be estimated with good accuracy by calculating the historical price behavior of the stocks in the portfolio (on a weighted average) relative to changes in the market as a whole.2

The optimal level of market risk—for the very long-term investor—is moderately above the average. This level makes sense because many other investors are not free to take a very long-term view; their investments will be liquidated sooner—for children’s education or at the termination of a trust or for a host of other near-to-medium-term events for which plans must be made. Other investors are simply unable to look with calm forbearance on the abrupt and substantial day-to-day, month-to-month, and year-to-year changes in stock prices that will be experienced in an equity portfolio over the long term. These investors want less risk and less fluctuation—and are willing to pay a price to get what they want.

In summary, the total return to an equity investor has four components: (1) the risk-free return; (2) an extra return to compensate for the riskiness or price uncertainty of investing in the overall equity market; (3) a potential extra return for investing in one or more particular groups of stocks or market segments that for various economic, business, or market psychology reasons might behave differently than the overall market; (4) a potential extra return for investing in specific stocks that, for the same sorts of reasons, might behave differently than the overall market.

In a similar manner, the risk accepted by the portfolio can be separated into the same kinds of component parts: risk associated with emphasis on specific stocks; risk associated with emphasis on or avoidance of particular groups of stocks or market segments that are influenced in similar ways by common causes; and risk associated with investing at all in equities.

Corresponding to each component of return—except the risk-free return—is a component of risk.

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2The market risk inherent in investing in any one market can, of course, be reduced in a multimarket portfolio by balancing investments in one market with investments in other markets that behave differently. This sort of diversification is an important motivation behind the interest in investing in real estate and in diversifying internationally. The stock markets of France, Hong Kong, Japan, Italy, and Australia fluctuate as much or more than the American market, but usually at different times and for somewhat different reasons. The multimarket portfolio with its investment in several different markets will have reduced the “unavoidable” market risk of any one market.

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A More Diversified Approach To Emerging Markets

By Jeff Troutner

In June, TAM added an “emerging markets” asset class to Moderate, Growth, and Aggressive portfolios. This was a move we had been contemplating for some time, but until Dimensional Fund Advisors introduced their new Emerging Markets Portfolio early this year, we could not find a fund that combined broad diversification with an indexed approach.

These features are very important in controlling risk while at the same time allowing us to participate in the growth of the emerging market economies. DFA’s fund will be evenly divided among 10 different countries: Brazil, Chile, Mexico, Portugal, Thailand, Turkey, Indonesia, Argentina, Malaysia, and the Philippines. Most emerging market funds are “market cap weighted” which can result in 50% of the portfolio invested in only two markets.

With emerging markets, we believe an indexed, evenly-weighted approach is particularly important for risk control. The potential growth of these economies will translate into higher stock prices over the long-term and since the movements of these markets are not highly correlated with the U.S. market, we derive a positive diversification benefit. We do not want to wipe out these benefits because some “guru” in Chicago, Los Angeles, or New York bet the farm on Malaysia over Thailand or Telefonos de Mexico over Telecom de Argentina.

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Total risk consists of an overall equity market component plus a market segment risk plus a risk related to uncertainty about the price behavior of the stocks of individual companies relative to the overall market.

Market segment risk and specific issue risk can be diversified away, as explained above, but overall equity market risk cannot. Figure 7-1 shows vividly how the riskiness of a single stock consists primarily of specific issue risk and market segment risk, but that in a typical portfolio, these two kinds of risk are reduced to only a small part of the investor's total risk.

The chart also shows that the typical large pension fund with several different managers will have even more diversification and that this surplus diversification will further reduce the specific issue and market segment risks to a very small percentage of total risk. This phenomenon of very great diversification so often experienced in large funds employing several managers—usually with each manager chosen specifically because of his or her “different” style of investing, but with their differences tending to cancel each other out—raises serious questions about very active management in institutional investing versus passive management with above-average market risk.

In investment management, we now know that the crucial factor is not how to manage rates of return, but rather how to manage market risk. By managing market risk, we mean doing two things at the same time: (1) deciding deliberately what level of market risk to establish as the portfolio's basic policy, and (2) holding to that chosen level of market risk. Changes in the level of market risk should only be made when there has been a deliberate change in basic, long-term investment policy.

With market risk under control, the investment manager and his client can decide whether and when to accept any individual stock risks or stock group risks in order to capture extra profits.

Note that while this part of investment management gets most of the attention by far from both managers and clients, it is usually only a side show compared to the main force driven by the chosen level of market risk.

That managing market risk is the primary objective of investment management is a profound assertion. It is the core idea of this entire chapter. The rate of return obtained in an investment portfolio is a derivative of the level of market risk assumed—or avoided—in the portfolio; the consistency with which that risk level is maintained through market cycles; and the skill with which specific stock risk and stock group risk are eliminated or minimized through portfolio diversification or are well rewarded when deliberately taken.

Recognition that risk drives returns instead of being simply a residual of the struggle for higher returns transforms the concept of investment policy. We now know to focus not on rate of return but on the informed management of risk.

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Performance Notes:


TAM Portfolio Return Net of Fees—These are the actual returns of TAM portfolios in each risk category net of actual TAM management fees, custodial fees, and fund expenses. The “Growth” returns were calculated using a model portfolio from 12/31/92 to 4/30/93. The “Aggressive” returns were calculated using a model portfolio from 12/31/92 to 3/31/93. In both cases, the maximum TAM fee was deducted, representative custodial costs were deducted, and all mutual fund returns are net of expenses. Past performance is no guarantee of future returns. This is especially the case with model portfolios which are not subject to specific economic or market factors. Benchmarks—Balanced Fund & Capital Appreciation Fund Indexes: Upper Analytica’s indexes representing the 30 largest balanced mutual funds and 30 largest capital appreciation mutual funds in the country.